

ABSTRACT

A method for growing a single-crystal region of a III-V compound on a surface corresponding to a crystallographic plane of a single-crystal silicon substrate, including the steps of growing by epitaxy on the substrate a single-crystal germanium layer; etching
5 in a portion of the thickness of the germanium layer an opening, the bottom of which corresponds to a single surface inclined with respect to the crystallographic plane or to several surfaces inclined with respect to the crystallographic plane; and growing the single-crystal III-V compound on the bottom of the opening.